SONIC™

PERFECT SYSTEM

COLLECTION

ソニック パーフェクト システム コレクション

CONTENTS

SONIC™
PERFECT SYSTEM
COLLECTION
2024 EDITION

In late 2022, I published the Sonic Perfect System guide. It offered my own take on the best way to play a wide array of Sonic the Hedgehog games.

Unfortunately, it also became outdated almost immediately after I released it. Advancements in modding for a slew of games, modding communities splintering and falling apart, massive updates to fan projects that invalidated chunks of the list... and of course, the release of several Sonic games, such as Sonic Frontiers. An update to the guide has been long overdue, and I decided the sheer amount of change in the modding community warranted a completely new guide.

This guide may never truly become the be-all-end-all to Sonic modding, despite the name 'Perfect System', as modding is always changing.

Its namesake, Thunder Force V: Perfect System, arguably isn't the definitive version of that game, either!

Rather, it's a window into how I have curated my own setup for playing Sonic games - and it's the setup I would give to friends looking to play Sonic, particularly those playing these games for the first time.

If a game isn't here, then I probably just play it as is - at least, for now. It doesn't mean you shouldn't play those games!

Games with just one mod, or standalone fangame projects, are considered 'Bonus Games' within this guide, and are presented as full page 'adverts'.

This guide doesn't work very well in Firefox's built-in PDF viewer. Please use an alternative. The guide is designed to be read like a 2 page book spread, rather than a series of long slides, so keep that in mind if you find the layout confusing at first.

ESSENTIALS

Mods that I think are vital for getting the 'Perfect System' experience. Make sure to check the mod pages in case there's any pre-requisites to get specific mods running!

OPTIONAL

Mods that aren't essential to 'Perfect System', but are nice to have (or just cool in their own right). Aren't necessarily compatible with 'Essential' mods.

CODES

Codes that are included in a game's Mod Loader. Tends to be pretty common for newer Sonic games, but Sonic Adventure 1 and 2 also support them.

For a guide on how to order mods within a game's Mod Loader, click this icon right here! If a game isn't listed, the order either isn't relevant or is fairly obvious. If you see any mods listed in the images that aren't mentioned in this guide, don't worry about them -they probably aren't necessary!

THE CLASSIC ERA

SONIC ORIGINS

SONIC 1&2 (DECOMPILATION)

SONIC 3 (A.I.R.)

SONIC MANIA

SONIC R

SONIC ORIGINS

PC - 2022

CONFIGURATION

Steam version is recommended for mod support. Use the HedgeMod Manager to install mods. Game includes Denuvo DRM.

ABOUT

A collection featuring Sonic 1, 2, 3 & Knuckles, and Sonic CD - all remade in the Retro Engine, with widescreen support. Also has DLC that adds Amy as a playable character, and Knuckles to Sonic CD.
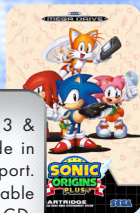
ESSENTIALS

SONIC ORIGINS ULTRAFIX
TEAM ULTRAFIX

900+ changes to every game in the collection, such as fixing bugs and inconsistencies - even fixing issues from the original 2013 releases. Makes these versions truly definitive.

S3&K HQ OST
CUBIE JUDY

Replaces the relatively low-quality music with superior versions. Origins Ultrafix includes higher quality audio for all games - I'd still grab the 3&K pack from this set, for the original Sonic 3 soundtrack. See notes for more information.

FIX CD FMV TIMING + SFX
THE A_GAMER554

Restores the sound effects to Sonic CD's ending, and adjusts the timing of the FMV footage to match up.

ORIGINS BLUR FIX
DARIO & SKYTH

Replaces the game's anti-aliasing option with Sonic Mania's filters, including CRT options and linear interpolation (to reduce pixel shimmering).

OPTIONAL

MD/SATURN BUTTON UI
NIGHTSKYE

Replaces the HUD with graphics based on the Mega Drive and SEGA Saturn's 6-button controllers. Ideal for use with RetroBit or 8BitDo's SEGA pads.

ALTERNATIVE MENU TEXT
TRACKER_TD

Replaces certain Menu Text to be clearer, such as making it more obvious that rankings are where Time Attack mode is for each game.

CD STYLE SONIC
RETROFOREVER

A fresh set of sprites for Sonic in Sonic CD specifically. Compatible with Ultrafix!

DID YOU KNOW?

The Origins version of Sonic 3 & Knuckles includes a slew of new Sound Test codes, based on the birthdays of various Headcannon team members. These include replacing every enemy with Penguinators, and replacing every item with the Competition Mode Banana Peel!
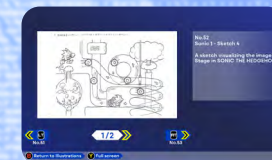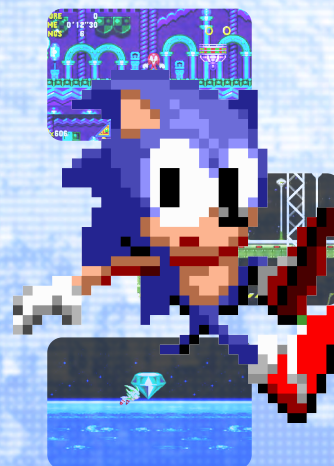
NOTES

The newest version of Origins Ultrafix includes its own replacements for certain tracks, particularly pertaining to Sonic 3. While I'd always recommend new players use the original soundtrack for the first run (hence HQ OST Collection being listed in Essentials), for returning players I'd say you should give the Ultrafix OST a fair shot.

SONIC 1 & 2 (DECOMPILATION)

Mega Drive - 1991 / Remaster - 2013

CONFIGURATION

Available via GitHub. You must provide a Sonic 1 or 2 RSDK file (from the 2013 remaster or Origins), and most mods also require the decompiled scripts. The decompilation has a built-in modloader, but a separate one is available too.

Using Sonic Origins features requires building the decompilation yourself.

ABOUT

A decompilation of the Retro Engine V4, allowing the 2013 Sonic 1&2 remakes to be played on PC. Predates the release of Sonic Origins.

ESSENTIALS

RANDOM TWEAKS (S1/S2)
UMINEKOSEAN

A slew of small quality of life tweaks to Sonic 1 & 2. Also adds cheat codes to enable options like 7 Chaos Emeralds and S3 shields on saved files.

MENU RECREATION (S1/S2)
LEONx254

Recreates the frontend menu from the mobile release entirely within the Retro Engine, and adds extra features on top.

ROLL JUMP LOCK REMOVAL (S1/S2)
GEARED

Removes the control lock when jumping out of a roll or spindash, akin to Sonic Mania.

KNUCKLES' WALL SPINDASH (S1/S2)
UMINEKOSEAN

Adds Knuckles' Wall Spindash from Sonic Advance 3. Also adds in being able to maintain a spindash when falling from a ledge, which is nice.
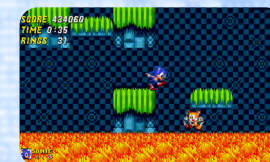
CONTROLS UNCHAINED (S1/S2)
SETHGOBSS

Adds a variety of additional moves for every character, such as the Super Peel-Out, Drop Dash, Flight Cancel, and more. Sadly, the mod is not configurable - it's all or nothing.

SONIC 1 FOREVER/2 ABSOLUTE
TEAM FOREVER

Probably the better option for using the decompilations nowadays. Based on an outdated version of the decomps, but provides a slew of tweaks, fixes, updates, and with far less hassle and worrying about mod compatibilities.

DID YOU KNOW?

In 1993, Japanese game developer Kiyoshi Sakai produced a homebrew Sonic game named 'Let's Go See the Hedgehog', for the Sharp X68000 home computer. It uses music from Tecmo's 'Gemini Wing', and boasts an impressive pseudo-3D Special Stage with smooth scrolling. Sakai later went on to create the Umihara Kawase series. This may be one of the earliest Sonic fangames!

NOTES

In 2023, the decompilations saw a major syntax update that made all previously developed mods incompatible. It is technically possible to use these older mods by using engine commits predating the syntax change, but it is not recommended by the decomp's development team. This is partly why I prefer to use Origins with Ultrafix now - less chance of sudden incompatibilities popping up. That, and Ultrafix tackles a slew of issues with the original remasters that never got fixed for the individual releases.

SONIC CD (DECOMPILATION)

Mega CD - 1993 / Remaster - 2011

CONFIGURATION

Available via GitHub. You must provide a Sonic CD RSDK file (from the 2011 remaster or Origins), and most mods also require the decompiled scripts. The decompilation has a built-in modloader, but a separate one is available too.

Using Sonic Origins features requires building the decompilation yourself.

ABOUT

A decompilation of the Retro Engine V3, allowing the 2011 Sonic CD remake to be played on PC. Predates the release of Sonic Origins.

ESSENTIALS

SCD MIRACLE EDITION

PETER4432

A huge slew of options for customising your Sonic CD experience, as well as bug fixes, new soundtrack options, and even a new super form to unlock.

ORIGINS FMVS

THEA_GAMER554

Ports the restored FMVs from Origins to the decompilations.

MEGAMI'S ADDITIONS

MEGAMI

Adds several quality of life features. Is also required for Miracle Edition.

DID YOU KNOW?

Keiko Utoku, the singer of CD's iconic JP/EU vocal tracks, was a member of the J-Pop group B.B. Queens. They had actually collaborated with SEGA before, for the album "SING!! SEGA GAME MUSIC". This album features vocal arrangements of various SEGA songs - and it later turned out that one track, 'Funky Brothers', was based on music made for the unreleased arcade game SEGASonicBros!
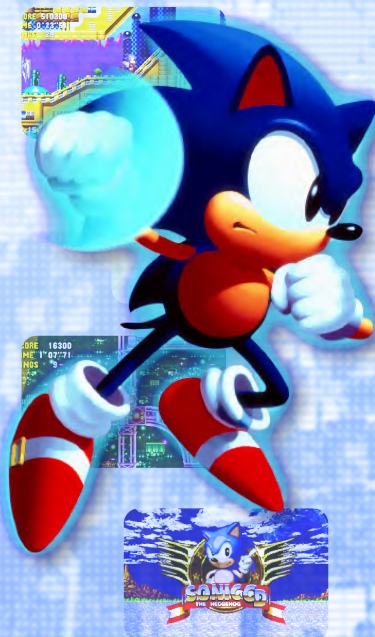
SONIC CD RESTORED

PIMPUIGI

As the name suggests, makes an absolute ton of adjustments to make Sonic CD's remake far more accurate to the 1993 release. Geared towards speedrunners as well, with run timing summary and autosplitter built in. Also adds Knuckles if using a built RSDKv3 and Origins datafile.

CD STYLE SONIC

RETROFOREVER

Gives Sonic a fresh set of sprites. Also has a version for Miracle Edition.

MANIAIFIED TITLE

LAPPERDEV, SHEPCICLE

Ports in LapperDev's Maniaified title screen graphics.
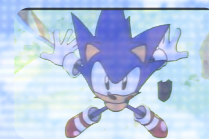
NOTES

In 2023, the decompilations saw a major syntax update that made all previously developed mods incompatible. It is technically possible to use these older mods by using engine commits predating the syntax change, but it is not recommended by the decomp's development team. This is partly why I prefer to use Origins with Ultrafix now - less chance of sudden incompatibilities popping up. That, and Ultrafix tackles a slew of issues with the original remasters that never got fixed for the individual releases.

SONIC 3 ANGEL ISLAND REVISITED

Mega Drive - 1994 / AIR Ver. - 2018

CONFIGURATION

Sonic 3 AIR is available from its own website. The game has a built-in modloader. Certain mods may require 'base' mods to function, so be sure to check for any pre-requisites.

You will need a Sonic 3 & Knuckles ROM to use Sonic 3 AIR. If you own Sonic 3&K on Steam, then it'll automatically use that. However, this version was delisted a while ago - so if you don't already own that version, you'll need to do something else.

ABOUT

A remake of Sonic 3&K in Eukaryot's own 'Oxygen Engine'. Pulls game data from the ROM and reinterprets it on the fly.

ESSENTIALS

ORIGINS PARITY GALORE
iCLOUDIUS

Adds in a slew of visual flourishes and fixes made in the Origins version of Sonic 3 & Knuckles.

OTHER ORIGINS PARITY MODS

A number of features from Origins are available in mods separate from Galore - these include new animations, Eggman's fleeing animation, the added cutscene between LBZ and MHZ, Eggman's blue glasses, and various Sound Additions.

WIDESCREEN BACKGROUNDS
MRGRASSMAN14

Adds in widescreen support for certain background elements, like Origins.

MISC. FIXES AND TWEAKS
MRGRASSMAN14

Plenty of fixes for minor bugs and annoyances found in Sonic 3 & Knuckles.

NO AIR BRANDING
MORSGAMES

Removes the Angel Island Revisited branding from the game.

DROP DASH +
MEGAMI

Adds multiple options for configuring the Drop Dash, including improvements to its accuracy and a choice of animation graphics.

STYLISED TAILS
PANORAMAHUSKY

Remakes Tails' sprites to be more consistent with Sonic 3's artstyle.

ACT-BASED SAVING
FADEINSIDE

Allows you to resume save files from the second act of a zone.

EMERALD TRADE ONLY AT MHZ1
MUTEKI

Makes the first Big Ring in Mushroom Hill the only place to *start* the Super Emerald run.

OPTIONAL

ORIGINAL ZONE ORDER
LEGOBOUWER9

Reinstates the originally planned level order, with FBZ in the Sonic 3 half.

S3C ZONE ICONS
VINNYGAR

Replaces the title card palmtree with a unique icon for each zone.

3'MIXED DUSK MGZ
HAHA_HOLLIE

Gives Marble Garden Zone a new, sunset themed background palette.

EXTRA SLOT MODS

Name a Sonic character, and someone's probably made an 'Extra Slot' mod to be able to play as them in Sonic 3.

NOTES

It probably seems a bit weird to opt for 3 AIR over Origins, given how many of the mods listed here are just to add things from the latter. But 3 AIR being built off the Mega Drive game directly has a number of benefits - and while Ultrafix narrows the gap, Sonic 3's Origins can be pretty wonky due to its seemingly haphazard development. I think you should try both and settle on your favourite. Certainly for modding, Sonic 3 AIR is a great option - if a decompilation of Sonic 3 Origins ever happens, it'll still be a long way off yet.

SONIC 1 (MASTER SYSTEM)

Master System - 1991

CONFIGURATION

Grab a Sonic 1 SMS ROM and a Mega Drive/Master System emulator or flashcart of your choice.

For FM audio support, you'll either need to enable the relevant setting in your emulator, or have a device capable of FM playback on hardware. Thankfully the Mega Everdrive X7 and Pro models have this functionality built in.

ABOUT

An 8-bit version of Sonic 1, developed by Ancient (Gotta Protectors, Streets of Rage). It's quite different to the Mega Drive game!

SONIC 1 PERFECT SYSTEM

TRACKER_TD, VALLEYBELL

Makes several tweaks to make Sonic 1 8-Bit a better experience. This includes removing Bridge Zone Act 2's autoscrolling, removing Jungle Zone Act 2's 'Kid Icarus Syndrome', reducing the intensity of Sky Base Zone's lightning flashes, and more. It also includes ValleyBell's FM soundtrack!
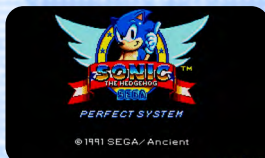
DID YOU KNOW?

The Game Gear version of 8-Bit Sonic 1 was ported by Arc System Works, the creators of the Guilty Gear series! They also developed the original Sonic Drift.

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SONIC BOOM IS TRULY NEVER ENDING.
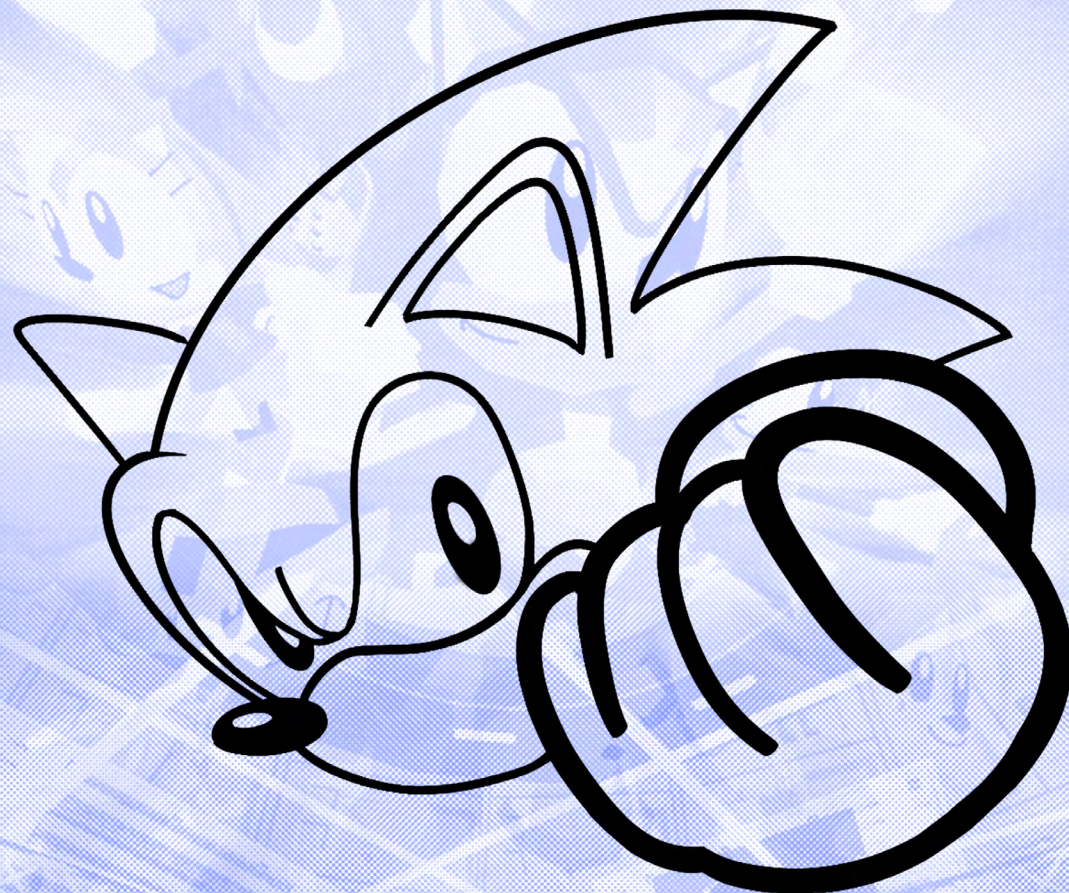
Sonic the Fighters is back, and better than ever! Enjoy new balancing changes, online multiplayer, training mode, regular tournaments, and even a new character to play as!
Rediscover Sonic's fighting debut, now on RPCS3.

Available from the Sonic the Fighters Discord!

SONIC
THE FIGHTERS
- COMMUNITY EDITION -

SEGA

SONIC MANIA

PC - 2017

CONFIGURATION

Sonic Mania is available on Steam. However, a decompiled version is also available, and allows the use of some mods I consider essential.

Using Plus DLC content with the decompiled version requires building it yourself, as with using Origins content in the other RSDK decomps.

The decomp has a built-in modloader, but you can also use the RSDK Mod Manager for an easier time configuring your mods.

ABOUT

A mysterious gemstone, the Phantom Ruby, is found on Angel Island. Sonic and friends investigate, and embark on a new adventure across zones old and new, to stop Eggman's latest scheme for world domination.

ESSENTIALS

TD BUGFIXES
TRACKER_TD
A few fixes for Mania issues that never got fixed, such as an unavoidable obstacle in Titanic Monarch Zone, and other minor adjustments.

BETTER GLIDE
TTTTTSD
Improves Knuckles' glide to be more consistent with Sonic 3 (and Origins Ultrafix). This includes restoring his glide bounce, and being able to spindash out of landing from a glide.

SPIN DASH LEDGE DROP
TRACKER_TD
Lets you maintain a spindash charge when falling from collapsing ledges, like in the original games.

FLIGHT RECURL
TTTTTSD
Allows Tails to curl into a ball mid-flight, like the AI-controlled Tails can.

MAX CONTROL
MEGAMI
Gives Sonic his complete moveset without the use of a cheat code.

DID YOU KNOW?
The timer in Sonic Mania's Special Stages is inspired by the Speedometer in Daytona USA 2: Battle on the Edge!

MISC GFX TWEAKS/FIXES
RETROFOREVER, LOUPLAYER
An array of fixes for various graphical errors and glitches found in the base game.

ACT 2 CLEAR JINGLE
MEGAMI
Implements the unused Act Clear jingle by Tee Lopes as an Act 2 Clear theme.

MIGHTY REDONE
CRAPPYBLUE
Reworks Mighty's sprites to look a bit nicer and homage SEGASonic more.

SUPER SONIC + SPRITES
HYPERNOVA_BOLT
Adds additional animations for Super Sonic where he previously used recolours.

OPTIONAL

SONIC MANIA TDX
TRACKER_TD
An expanded version of TD Bugfixes. Adds Mirage Saloon Act 1 Encore to Mania Mode, as well as a short Angel Island bonus act. Has poor mod compatibility.

SONIC MANIA & HATSUNE MIKU
TRACKER_TD
You knew this would be here. Play as Hatsune Miku and take down Crypton Future Media's various sponsors, with remixes by beat_shobon and Syndication.

BASICALLY ANY ENCORE MODE MOD
There's a bunch of different Encore Mode colour mods - just pick your favourite! I personally use a mix of a bunch, with Encore+ as the base.

ENHANCED HYDROCITY
CSEAN
Gives Hydrocity a fresh coat of paint, since it didn't see as dramatic an overhaul as some other Mania stages.

MIGHTY'S WALL JUMP
TTTTTSD
Gives Mighty his wall jump from Knuckles Chaotix.

SONIC R

Saturn - 1997 / PC - 1998

CONFIGURATION

Sonic R is available on PC - however, the most common PC version was designed for PCs in 1998. As such, you'll want to grab the Sonic R Updater, which will ensure you can run the game on modern PCs, and with various improvements such as higher resolution graphics and ADX Music - and it includes the Sonic R Mod Manager, too!

ABOUT

Sonic and co enter the World Grand Prix, because Eggman's entering. Unsurprisingly, he's up to no good - the Chaos Emeralds have been detected near the racetracks, and Eggman has a new line of metal doppelgangers ready to strike!

ESSENTIALS

SONIC R IMPROVEMENT MOD
SHOWIN

Adjusts Sonic R in various ways. Character balance adjustments, a new final boss race against Dr. Eggman, and even a new practice stage to mess around in.

TEXTURE FIXES

Sonic R has a lot of texture issues! There's fixes for Super Sonic, Egg Robo, Sonic and Robotnik, Knuckles, and Tails!

SATURN STYLE COLOURING
INVISIBLEUP

Restores the colourful lighting from the SEGA Saturn version to the PC version, making it look dramatically better.

WIDESCREEN ASSETS
ELLASENT AND CHEATFREAK

Prevents certain assets from being stretched on a 16:9 display. Also clears up some stray pixels in various menu graphics.

OPTIONAL

AMY's 86
AGER III

Replaces Amy's car with the only vehicle fit for delivering Tofu.

SONIC R MANIA
RLAN

A comprehensive rexture of Sonic R, making it themed around Sonic Mania! Radical City into Studiopolis is a highlight.

SATURN RACE ICONS
SONICFAN2005

Restores the SEGA Saturn character icon graphics, if you want to be even more Saturn accurate.

NOTES

Sonic R on PC seems to have a bit of an issue with closing - namely, just clicking X on the window won't actually end the process. You'll either need to end the game the proper way through the Options Menu, or kill the process using Alt-F4.
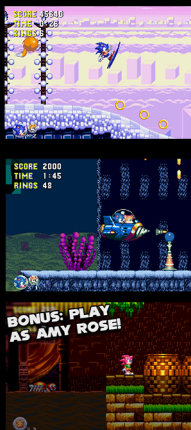
THE ADVENTURE ERA

SONIC ADVENTURE

SONIC ADVENTURE 2

SONIC HEROES

SONIC ADVANCE 2

SONIC RIDERS

SHADOW THE HEDGEHOG

SONIC THE HEDGEHOG (2006)

SONIC RIDERS: ZERO GRAVITY

SONIC ADVENTURE

Dreamcast - 1998 / PC - 2004

CONFIGURATION

The Sonic Adventure Mod Installer will convert your Steam install of Sonic Adventure DX to the more moddable 2004 PC release. It'll also install several essential mods. It also installs the Sonic Adventure Mod Manager, which supports both Sonic Adventure and Sonic Adventure 2 within one mod loader.

ABOUT

Dr. Eggman awakens the God of Destruction, Chaos. Sonic and friends are thrown into a race against time to collect the Chaos Emeralds before Chaos can absorb them, and prevent a potentially world-ending catastrophe.

ESSENTIALS

LANTERN ENGINE

SONICFREAK94

Restores the Dreamcast's palette-based lighting engine to Adventure DX.

DREAMCAST CONVERSION

PkR

An extensive overhaul to basically restore levels, objects, effects, textures and more back into their Dreamcast versions.

DREAMCAST CHARACTERS

IT'SEASYACTUALLY

Replaces SADX's 'upgraded' character models with the Dreamcast versions.

DID YOU KNOW?

There's an unused character in Taito's Puzzle Bobble 2X - a pink rabbit with a big grin, who bears more than a small similarity to a certain blue hedgehog. The fact the character's internally called 'SNC' makes it even more obvious.

HD GUI 2

PkR, DARK SONIC, SONIKKO, SPEEPSHIGHWAY

Replaces various GUI/HUD textures with custom-made high resolution versions.

SOUND OVERHAUL

PkR, REVERIEPASS

Fixes various sound bugs, restores missing sounds, and improves quality/volume.

DREAMCAST DLC

PkR

Enables the Dreamcast-exclusive DLC events in Sonic Adventure DX.

SUPER SONIC

KELL

Unlock Super Sonic for use in normal play after beating the Last Story, as was originally planned for the game.

ONION SKIN BLUR

SONICFREAK94

Restores the motion blur effect to Sonic's run animation, only found in the original 1998 Japanese release of Sonic Adventure.

NOTES

These mods are installed by the Sonic Adventure Mod Installer. The installer isn't actually maintained anymore, but it's a good way to quickly grab the essentials, and the Mod Manager will update the mods it includes to their latest versions after installation. At some point, the Installer may be effectively integrated into the Mod Manager. If you see a mod that the mod installer includes not listed here, just assume you should enable it anyway. That said, be advised that SADX Fixed Edition's changes are mostly covered by Dreamcast Conversion, so it isn't necessary anymore.
See the next page onwards for even more Essential Mods, beyond those installed by the Mod Installer!

SONIC ADVENTURE

CONTINUED FROM PREVIOUS PAGE

ESSENTIALS CONTINUED

SONIC ADVENTURE RETRANSLATED
SKINGBLUE

Replaces the English subtitle track with Windii's retranslation of the original Japanese script. For use with the Japanese dub.

EGGMAN NPCS
TRACKER_TD

For use with Retranslated. Changes NPC mentions of Robotnik to Eggman.

SMOOTH WALL COLLISIONS
HOPPYBOPPYBUNNY

Reduces friction when grinding against walls at speed.

BETTER TAILS AI
SORA

Makes Tails less stupid when he's following Sonic. Even includes Fast Travel!

FIXES, ADDS, BETA RESTORES
SUPERCOOLSONIC

Restores various cut content, while also fixing bugs such as the missing Jackle card in Casinopolis. Highly configurable!

PALETTE FIXES
YOUKNOWTHEDEV

Makes character lighting appear consistent with time of day.

TRACKER'S TEXTURES '24
TRACKER_TD, KAWAIIKAORICHAN

Various customised textures by yours truly - including 2D art for 1Up Icons, and more era appropriate artwork for Metal Sonic.

TIME OF DAY
PkR

Allows taking the train to change the time of day after finishing a Story. Included with the mod installer.

FLASHBACK WIDESCREEN FIX
KESNOS

Makes the flashbacks in Amy and Gamma's stories display properly in 16:9.

GAMMA'S NO-SQUEAK WHEELS
BTBRIDO1

Removes the awful high-pitched whine from Gamma's wheel mode.

RED MOUNTAIN FIX
KEAT

Lets Sonic jump off Red Mountain's cliff as intended, in the cutscene after it.

HI-POLY EVENT EGG CARRIER
KAWAIIKAORICHAN

Replaces the Egg Carrier's model in cutscenes with a less shoddy version.

PERFECT CHAOS MUSIC SWAP
CHEATFREAK

Plays Open Your Heart in the second phase of Perfect Chaos. Much better.

CHAOS 4 EASY KILL
KGL

Reduces Chaos 4's health, to make the fight drag on less.

TWINKLE PARK BOWLING CAM
WINDSURF7

Fixes the camera for Twinkle Park's bowling sections in the DC Conversion.

SONIC ADVENTURE

CONTINUED FROM PREVIOUS PAGE

OPTIONAL

SKY CHASE SKIP
JORDAN

Don't fancy sitting through "Panzer Dragoon, but mid"? This mod lets you hold a button and skip it all.

NO SPLORCHING
TRACKER_TD

Sonic Adventure's explosion sound effect is... a choice. This mod replaces it with a more conventional version.

AMY'S EYELINER
KAWAIIKAORICHAN

Gives Amy eyeliner, akin to her Sonic Adventure artwork.

NO QUESTION MARK
KELL

Replaces the Question Mark on the Character Select screen with Super Sonic and Metal Sonic's actual models.

WINDY VALLEY/TWINKLE PARK EX
SOLOSLACKER

Expands Sonic's Windy Valley to include Gamma's opening section, and Amy's Twinkle Park to include more of Sonic's Act 2 section.

SONIC ADVENTURE MEME MAKER
SPEEPSHIGHWAY

Fancy yourself the next Jehtt? Want to make a funny image to put on Twitter? Just want to mess with Sonic's animations? Go have some fun!

DID YOU KNOW?

One NPC in Station Square's Adventure Field asks Sonic about Angel Island. However, in the original Japanese script, as well as in the early localisation present in an E3 demo, he actually mentions Little Planet from Sonic CD too!
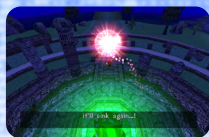
EGG CARRIER OCEAN MUSIC
PkR

Plays the track 'The Ocean' once the Egg Carrier has crashed into... well, the ocean.

METAL SONIC HOVERS AT FULL SPEED
MAINMEMORY

Prevents Metal Sonic from using Sonic's regular running animation at full speed.

CAN ALWAYS SKIP CREDITS
MAINMEMORY

Self-Explanatory. We've all watched them a hundred times!

USE TORNADO 2 HEALTH BAR
MAINMEMORY

Enables a unique healthbar for Sky Chase Act 2.
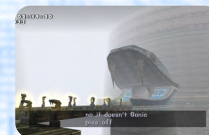
NOTES

While this list may look daunting, remember that the first page is installed with the Sonic Adventure Mod Installer - so it's not actually too bad!

The 'Codes' section refers to codes available in the second tab of the SA Mod Manager, and it's something you'll see in a lot of games going forward.

DID YOU KNOW?

When Metal Sonic was added to Sonic Adventure DX, he didn't have any existing 'Modern' artwork. In at least one Japanese SADX guide, they just use his Sonic CD artwork! This is also the case in Sonic Pinball Party, where his dialogue portrait is simply his Sonic CD artwork, reshaded into the Adventure-era style. This is the basis for his life icon in Tracker Textures.
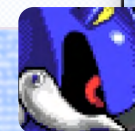
SONIC ADVENTURE 2

Dreamcast - 2001 / PC - 2012

CONFIGURATION

The latest version of the Sonic Adventure Mod Manager supports both Sonic Adventure and Sonic Adventure 2 from just one installation of the Mod Loader - which is very helpful! Just click the drop-down menu at the bottom right of the Mod Loader to change which game you're selecting mods for.

ABOUT

Dr. Eggman discovers the research of his grandfather, Gerald Robotnik, and awakens the Ultimate Lifeform - Project Shadow. Sonic is framed, and hunted down by the military - but unbeknownst to everyone but Shadow, a greater conspiracy is at play...

ESSENTIALS

SA2 RENDER FIX
SHADDATIC, EXANT, SPEEPS, JUSTIN113D

Fixes a huge array of graphical issues introduced by Adventure 2's PC port.

CUTSCENE REVAMP
SPEEPS, END USER

Fixes various issues specific to Adventure 2 Battle's updated cutscenes.

SA2 INPUT CONTROLS
SHADDATIC

Fixes the game's broken analog sensitivity, and provides deadzone options.

SA2 VOLUME CONTROLS
SHADDATIC

Provides full control over Adventure 2's infamously awful sound-mixing.

ERROR MESSAGE FIXES
SORA

Removes the bizarre 'controls changed' and 'internet required' error messages. Someone tell Nerissa...

HD GUI 2
SPEEPS, WINDII

Replaces various GUI/HUD textures with custom-made high resolution versions.

SMOOTH WALL COLLISIONS
HOPPYBOPPYBUNNY

As with the Sonic Adventure mod, prevents speed loss and twitchiness when hitting walls.

MENU OVERHAUL
SPEEPS

Removes clutter from the menu, and basically allows you to restore the menu back to the Dreamcast/Gamecube version. Configurable!

NO LOD MODELS
SONICFREAK94

Disables the lower-quality models used for distant characters and multiplayer.

ENHANCED CITY ESCAPE
SHADDATIC

Restores poster textures, SET layouts, fog effects, and even the giant 'WELCOME' sign seen in the Dreamcast version of City Escape.

ODDITY PATCH 1 & 2
EN PASSANT, CHEATFREAK

Fixes various oversights, such as missing Golden Beetles and Hint typos.

DREAMCAST CHARACTERS
END USER

Replaces models and animations for every character with their Dreamcast version. Ensures consistency with cutscenes. Also has options for Sonic's original shoes, seen in Sonic Adventure 2: The Trial!

TRACKER TEXTURES
TRACKER_TD

Even more textures edited to my preference. Mostly centered on item icons - these textures try to be closer to the DC textures than HD GUI's.

SONIC ADVENTURE 2

CONTINUED FROM PREVIOUS PAGE

E S S E N T I A L S — CONTINUED

RETRANSLATED STORY -COMPLETE-
SANGLISH, WINDII

Retranslates literally everything from the Japanese dub - even adding subtitles for ingame lines! That said, if the amount of subtitles gets overbearing, just remove the dll line in the mod's mod.ini file.

RETRANSLATED HINTS
SANGLISH

Retranslates the original Japanese hints for the Treasure Hunting stage, meaning they should actually make a bit more sense.

CHAO WORLD EXTENDED
DARKYBENJI, EXANT

A huge array of improvements, quality of life features, and configurable options for the beloved Chao Garden portion of Adventure 2.

ENHANCED CHAO WORLD
SHADDATIC

Even more improvements, quality of life features and configurable options for the Chao Gardens. Works with Chao World Extended!

ROUGE'S EYE FIX
SONENIO

Fixes a bug with Rouge's eyes when she climbs from side-to-side.
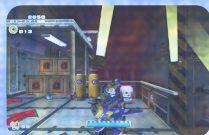
HEDGEPANEL
SPEEPS

Tweaks for Sonic and Shadow, such as keeping momentum into a somersault.

AMY EYELINER FIX
SPEEPS

Fixes Amy's broken eyeliner on her Dreamcast model.

O P T I O N A L

BETTER RADAR
KELL, KESNOS

Imports Adventure 1's Emerald Radar into Adventure 2's Treasure Hunting. Makes them much quicker to beat, but also less annoying.

IMPROVED CHAO WAYPOINTS
MINDACOS

Allows Chao to explore more of the Chao Gardens on their own.

DC GUN ROBOTS
FIREBOW59

Replaces various GUN Robot models with their Dreamcast versions.

STORY MODE FEATURES IN STAGE SELECT
NAZOU1113

Plays Eggman's taunts in Crazy Gadget and Eternal Engine outside of Story.

REAL-TIME SKIN SELECTOR
SORA

Swap character skins with a custom menu ingame!

C O D E S

REDUCE SPINDASH DELAY
MAINMEMORY

Allows the spindash to start up quicker, while not being spammable like Adventure.

D I D   Y O U   K N O W ?

IGN reports from E3 2000 reporting seeing some very interesting Sonic Adventure 2 concept art, such as a 'big several eyed monster', and a 'very human-looking, floating angelic-good like chick (sic)'. The latter is particularly interesting - could it be referring to Maria?

SONIC HEROES

PC - 2004

CONFIGURATION

The PC version of Sonic Heroes will require a No-CD crack to run on modern platforms. SEGA actually officially published one for an Australia-only Sonic PC collection, so go for that. For loading mods, you'll want to use the very powerful and very confusing to set up Reloaded-II mod loader. That said, most of the mods here can actually be installed from within Reloaded-II itself, which is great! Mods without a link are available via the loader.

ABOUT

4 teams set out on an adventure, each with a different motivation. Team Sonic are out to stop Dr. Eggman. Team Dark want to find Eggman and get some answers on their past. Team Rose want to find Sonic, Chocola Chao, and Froggy. Team Chaotix want a paycheck. But an old rival is waiting...

ESSENTIALS

TONERR
SEWER56

Dynamic Memory Buffer for Sonic Heroes, allowing bigger files for mods.

CRI FILESYSTEM HOOK
SEWER56

Again, for bigger mod files, as well as faster startup times.

ESSENTIAL GRAPHICS
SEWER56

Adjustments to allow Sonic Heroes to look right on modern systems.

CONTROL HOOK
SEWER56

Provides support for custom inputs in mods, and includes companion mods to enable XInput support and custom mappings.

WIDESCREEN REVAMP
RAPHAEL DREW BOLTMAN

Adjusts the game to properly support widescreen.

HEROES UNDUB
THEGERSHON

Forces the game to use the Japanese dub. Admittedly Heroes' Japanese dub isn't actually too great, but I'll take it over all those Eggman's robots...

HEROES RE-TRANSLATED
TRACKER_TD

Retranslates cutscenes to match the JP script. It doesn't deal with in-stage dialogue, however. Another mod like this is in development, but apparently has a number of issues at the moment.

4X GUI TEXTURES
TRIFORCE141

Upscaled HUD textures, that play nice with Widescreen Revamp and Character Visual Overhaul. Must be installed manually, follow the instructions!

CHARACTER VISUAL OVERHAUL
LUNAALEX64

High-quality textures, and removes the overly glossy appearance the models usually get stuck with.

CONSOLE RESTORATIONS
BRANDONDORF9999, SONIKKU A, HIRAI

Fixes for various things. As well as the main Console Restorations mod, you should also check out the Metal Sonic Fix, Transparency Blending Fixes, and sandemc's 'Fix Compilation' (which is a .bsp patch for the Sonic PC Collection exe mentioned in the Configuration section.

EXTENDED DRAW DISTANCE
SEWER56

Draws objects from further away. Handy to have.

LOD RING REMOVAL
DONUTSTOPGAMING

Removes the level-of-detail model for Rings.

DID YOU KNOW?

If you let go of the analog stick while using a Power character's attacks, you won't slide all over the place. Knowing this improves Heroes considerably, all by itself, as weird as it feels releasing the stick while running just to throw an attack.

SONIC HEROES

OPTIONAL

PHYSICS SWAP

SEWER56

Allows customising the game's physics. Fun to mess around with.

PHYSICS PRESET + STAGE FIXES

LUNAALEX64

A set of customised physics for use with the above mod, and stage edits to make sure they're still beatable. This used to be Essential - I couldn't bear playing Heroes with vanilla physics - but over time I've come to realise most of Heroes' issues are level-design related, or just jank that this mod doesn't necessarily fix - these physics just let you skip a lot of jank by virtue of being extremely overpowered.

HD RINGS

RAPHAEL DREW BOLTMAN, SOLOSLACKER, DONUTSTOPGAMING

Customise how the rings look! I make them look more like the SA1/SA2 rings. Includes LOD Ring Removal, so if you get this, you don't need that.

ENEMY RETEXTURES

REVERNIR

Higher quality textures for various enemies.

INDEPENDENT FLYING CHARACTERS

RYANBEVINSDEV

Allows flight characters to act independently of the others at will.

DID YOU KNOW?

One of the configuration arguments you can specify in Heroes' PC port is "Charmy_ShutUp 1". This mutes all non-subtitled voices - even the developers were sick of hearing that bee.

SONIC 2 ADVANCE SP

Sonic Advance 2, as you've never played it before!

A new, rebalanced version of the original game, Sonic Advance 2 Special offers expanded levels, and more ways to save the day from the nefarious Dr. Eggman!

Play as Sonic and his friends, including Cream the Rabbit, and show those robots who's boss!

GAME BOY ADVANCE

ASTRO MUSEUM · SEGA · SONIC TEAM · Dimps

SHADOW THE HEDGEHOG

Gamecube/PS2/Xbox - 2005

CONFIGURATION

The Gamecube version of Shadow the Hedgehog is generally considered the most stable, and it's also what the main mod in this section is designed for. You can either use a real hardware solution, such as the SD Media Launcher or Optical Drive Emulator, or just use Dolphin (which is what I do).

ABOUT

Shadow the Hedgehog has amnesia. Suddenly, an army of aliens invades, and their leader offers Shadow the answers he's after. It's up to Shadow to choose whether to work with the aliens and destroy humanity, or repel them with Sonic and friends. Hero or Villain - you decide! Sort of!
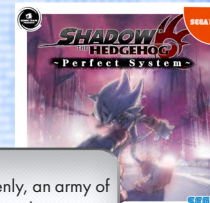
ESSENTIALS

SHADOW RELOADED

LIMBLESSVECTOR, DREAMSYNTAX

The main mod for this section - and if you prefer the EN dub, the only one. Fixes bugs, make mission goals more reasonable (without being easy), and generally rebalances the game. Massively improves the experience!

JAPANESE IMPORT

LORENZO01

I only actually use the sound clips from this mod, nothing else. DreamSyntax has prepared a guide on integrating this mod with Reloaded, though they aren't actually designed to be compatible.

SHADOW KINDA RETRANSLATED

TRACKER_TD

Uses Windii's translated JP script during cutscenes. There's actually a complete translation mod for the game now - I just use this because I personally made some edits where the English phrasing felt a bit too literal.

DID YOU KNOW?

Despite the game being about discovering the truth behind Shadow's past, the only way to get a straight answer on what happened after Sonic Adventure 2 is to wait 9 minutes during the true final boss. Go figure.

WELCOME TO THE GRAND PRIX

NEW CHARACTERS : REBALANCED GAMEPLAY : NEW MUSIC : ONLINE COMMUNITY

SONIC RIDERS DX 2.0
ソニックライダーズDX

SONIC THE HEDGEHOG (2006)

Xbox 360 - 2006

CONFIGURATION

You can play the Xbox 360 version on PC, via the Xenia emulator, but you'll specifically want the Canary build. In Xenia's config.toml file, you'll want to add 'd3d12_clear_memory_page_state = true' to minimise graphical errors, and 'max_queued_frames = 16' to avoid audio delay. If graphical issues do crop up, pressing F5 usually fixes them - you can bind this to a button, too.

Use the 06 Mod Manager to load mods; you'll need to extract the ISO first. By default the mod loader uninstalls mods after every game exit, but you can disable this in the settings to avoid rebuilding the game every time you want to play it.

ABOUT

Dr. Eggman invades the nation of Soleanna, to discover the truth behind its legendary 'Flames of Disaster'. Sonic sets out to stop him and rescue Princess Elise. Meanwhile, Shadow sets off on an assignment for GUN, and newcomer Silver the Hedgehog seeks the 'Iblis Trigger' responsible for his destroyed futrure.

ESSENTIALS

LEGACY OF SOLARIS
LOST LEGACY

The main mod for this section. Implements a slew of fixes, cut content, and extra content into the game. Pretty essential stuff!

SONIC 06 RETRANSLATED
SHADERUNNER

Does what it says on the tin, using Windii's translation. Technically incompatible with Legacy of Solaris, but if load it at a higher priority than LoS this should work.

MACH SPEED ANIMATION
ULTIMATESIMBA

Makes Sonic use his mach speed running animation outside of those areas, rather than his odd-looking arms-splayed pose.

DID YOU KNOW?

Sonic 06 has references to an enormous amount of unused content, including the ability to unlock music from past games, Super Sonic usable in action stages, and even Metal Sonic as an unlockable character! Oh, what could have been...

REMASTERED UI
HYPER

Higher resolution UI assets, along the lines of the HD GUI mods for the Sonic Adventure games.

FIXED CUBEMAPS
LUIG

Fixed cubemap rendering issues, most notable in places such as Kingdom Valley's final section.

CODES

LEGACY OF SOLARIS CODES
VARIOUS

While the 06 Mod Loader has a slew of codes, Legacy of Solaris automatically loads a selection of them, and any beyond that may cause issues. Tread carefully.

NOTES

You might be surprised that this section doesn't just say "Play Project-06." For those unaware, Project 06 is an extremely impressive recreation of Sonic 06's action stages by ChaosX. While the controls and production values are a considerable step-up from the original Sonic 06, I don't think P-06 actually acts as a replacement for experiencing the original game, and as ChaosX has no plans to implement Story Mode, I don't think it ever will. That's not to say people shouldn't play it though - I just think there's actually genuine value in trying the original game first, before seeing how P-06 does things.
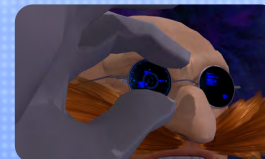
THE MODERN ERA

- SONIC UNLEASHED
- SONIC COLOURS
- SONIC GENERATIONS
- SONIC LOST WORLD
- SONIC FORCES
- SONIC FRONTIERS
- SONIC SUPERSTARS

SONIC UNLEASHED

Xbox 360 - 2008

CONFIGURATION

As with 06, you'll want Xenia Canary, with the same parameters in the config - even the Mod Loader is very similar. For much of the setup, you'll want to consult this guide by Starlight. You must extract Unleashed's ISO to use mods.

Sonic Unleashed on Xenia is a complicated beast. You've basically got two options: run DirectX 12 at 720p, with these configuration options set in the xena-canary-config.toml file, or use Vulkan. DirectX 12 is prone to crashing, but set to 720p and with the linked settings active, I was able to play through nearly the entire game without a single crash, and AMD's CAS upscale does a pretty nice job.

Vulkan is technically more stable, but performs worse and has missing object graphics.

ABOUT

Dr. Eggman cracks the world like an egg, to release the ancient god Dark Gaia. Sonic sets out to put the planet back together, but discovers that at night, he transforms into the fearsome Werehog!

ESSENTIALS

SONIC UNLEASHED FIXES
ARCHXE

Fixes stuff to make Unleashed run properly on Xenia.

HOMING ATTACK ON JUMP
M&M

Moves the homing attack onto the jump button, like literally every other Sonic game before Unleashed (and most of the games afterwards, too).

BATTLE MUSIC FIX
BLUWOLF

Removes the battle music from encounters, meaning you get to enjoy the genuinely fantastic night stage music for more than 5 seconds.
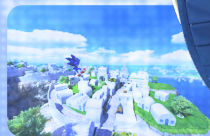
FRAMERATE UNLOCK FIX
KING GALACTIX

Fixes various elements that are broken by upping the framerate to 60fps or above.

DID YOU KNOW?

Sonic Unleashed's human designs were handled by illustrator unit Gurihiru, whose work you may recognise from The Unbelievable Gwenpool and other Marvel Comics titles.

UNLEASHED HDR FIX
VOIDSHADOWS, DAYDEL, STARLIGHT

Fixes the HDR Gamma being too low, which makes the game appear darker.

FOREIGN INPUT SYSTEM
KING GALACTIX

Adds to Werehog's combat, allowing move cancels and new combo routes, more consistent inputs, and more satisfying movement. Surprisingly this doesn't make the game a cakewalk though…

UNLEASHED DE-LEVELLED
MANGOMIMK

Reduces EXP level and Medal Requirements, to allow the game to move at a better pace than it usually does.

CODES

XENIA SU PATCHES

Patches for running in SU in Xenia. You'll want to enable the 60fps patch, 1280x720 patch, and Disable Colour Adjustment, in the relevant patch.toml.

OPTIONAL

PERFORMANCE ENHANCEMENT
KING GALACTIX

Need some help getting better FPS? This mod has you covered.

NOTES

A special thanks to Auntie_Aliasing for their recommendations on running Unleashed on Xenia. After dealing with DirectX's crashes, and Vulkan's lack of object rendering, I'd given up hope on finding a setup I was happy with; so I'm very grateful to them for sharing theirs!

As an additional note, many mods have multiple versions for Unleashed's Title Update version, and its DLC. I personally have the Title Update, but not the DLC - make sure to use the right versions!

TORNADO STAGE SKIP
KING GALACTIX

Don't fancy mashing QTEs for five minutes? Well, here you go.

AN XBOX SERIES X/S
MICROSOFT

If you want to ignore the above and have a more stable experience, just grab an Xbox Series X and play Unleashed on there.

SONIC COLOURS

Wii - 2010 / PC - 2021

CONFIGURATION

Sonic Colours Ultimate is available on Steam and the Epic Games Launcher. You should really opt for the Steam version. This isn't because I hate Epic; Colours Ultimate legitimately runs considerably worse on Epic, due to a faulty debugger that's constantly running on the Epic version.

The game uses the HedgeModManager.

For an alternative to Colours Ultimate, see the next page.
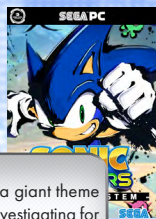
ABOUT

Dr Eggman has changed his ways, and creates a giant theme park in space to apologise. It doesn't take much investigating for Sonic and Tails to discover it's cover for his latest scheme - and Sonic must use the power of aliens named Wisps to save the day.

ESSENTIALS

PROJECT RE-RAINBOW
TEAM RE-RAINBOW

A major overhaul for Sonic Colours Ultimate, fixing a variety of bugs, and providing a transformative rework of the visuals. Even includes redone cutscenes! It's currently in an early stage, so report any bugs to the developers!

GAMEPLAY & UI FIXES
HYPER, PTKAY, SAJID

Various fixes for broken UI elements, and also provides an option to restore Colours' original lives system, as opposed to the infinite lives and 'Tails Save' mechanic added in Ultimate.

OPTIONAL

WII STAGE LAYOUTS
RENAI

Restores stage layouts from the original Wii version, meaning no more clumsily tacked on Ghost Wisp. It'd be essential, but it appears to conflict slightly with Re-Rainbow; I noticed some minor lighting and object/texture differences when loading the two together. You might not notice though!

NOTES

While Sonic Colours Ultimate with Re-Rainbow now makes for what I think may be the best way to experience Sonic Colours, it's also a tad more demanding due to relatively poor optimisation and some shader compilation issues. As such, I wanted to include my previous 'loadout' for playing Sonic Colours - via Dolphin, with a selection of mods specific to the Nintendo Wii version.

SONIC COLOURS DX
THREETHAN

Overhauls Colours Wii's graphics considerably, and also makes adjustments for 60fps support. Has an easy to use installer too!

BETTER COLOURS MATERIALS
BLUWOLFBLITZ

Colours DX adds new materials for Sonic's model that don't seem to be implemented properly. Adding these files to the 'modded files' folder in DX's directory, then rebuilding the game, will allow using these nicer materials instead.

HI-RES HUD
TRIFORCE141

What it says on the tin. Colours DX technically includes this, but that version is outdated - so you'll want to place this over the one included with DX. You'll need an extra file for Xbox mappings, too.

SONIC GENERATIONS

PC - 2011

CONFIGURATION

The original release of Sonic Generations on PC was delisted in 2024, due to Sonic x Shadow Generations. You can still grab it from the Ultimate Sonic Bundle on Steam, though.

Sonic Generations uses the HedgeModManager, as does basically every Sonic game going forward. The Mod Manager should find your Steam installation automatically.

ABOUT

A mysterious monster named the Time Eater ruins Sonic's birthday party, and him and his friends end up in a 'White Space' full of places and enemies from their past. And Sonic runs into himself - just looking a lot shorter and chubbier. Now the two Sonics must team up and restore time and space.

SEGA PC
SONIC GENERATIONS
PERFECT SYSTEM

ESSENTIALS

BETTER FXPIPELINE
SKYTH

Improves on the game's FXPipeline renderer.

DIRECT3D 9 EX + D3D 11
SKYTH

Direct3D 9 EX fixes a slew of performance issues present in the game's Direct3D wrapper, and offers much better graphical options such as borderless windowed. Direct3D 11 does more on top, such as shader pre-compilation. I use both, as having D3D9EX enabled with D3D11 ensures mod compatibility.

FIX BROKEN MATERIALS
M&M

Fixes missing, incorrectly mapped or incorrectly animated materials.

WALL JUMP FIX
HARPER MARIE ROSE

Generations' PC version breaks the wall jump slide. This mod fixes it.

HI-RES HUD
JOETE

Recreates the game's HUD at double the resolution.

CLASSIC SONIC IMPROVEMENT
SHOWIN

Makes Classic Sonic play more like Classic Sonic, as well as giving him the Drop Dash from Mania. Lots of configurable options too!

HQ PRE-RENDERED CUTSCENES
MBECA

Replaces the jarringly low-res pre-rendered cutscenes with higher-resolution versions, taken from the PS3 port.

SEASIDE HILL ENHANCEMENTS
FRANK

Replaces enemies such as Spinners in Seaside Hill with Egg Flyers, since they were actually in Sonic Heroes. Mod was delisted - this is a mirror.

SONIC GENERATIONS RE-TRANSLATED
TUNATUNERFISH

Implements Windii's translated Japanese script. Worth trying, because there's a few funny jokes that didn't make it into the English script.

HD CLASSIC TAILS
SHOWIN

Classic Tails' ingame model looks a little... off, to me. This brightens his materials and makes him look less grey.

QUICK STEP FIX
MARIO TAINAKA

Restores the sound that's supposed to play when Sonic does the Quick Step.

OPTIONAL

PLANET WISP M4 LIGHTING
PYKOL

Uses the lighting from Planet Wisp's 4th Mission in the main stage. I just think it looks a lot nicer, honestly...

SONIC GENERATIONS

CONTINUED FROM PREVIOUS PAGE

OPTIONAL — CONTINUED

FREE CAMERA
SKYTH

Basically adds a Photo Mode into the game, which I have way too much fun with.

UNLEASHED DRIFT
SKYTH

The Unleashed Drift just... looks cooler, y'know?

STARTUP LOGO REMOVAL
KORAMA

Boots the game straight to the title screen. Great for testing mods!

ADDITIVE HOMING ATTACK
SAJID

Tap homing attack to bounce up off enemies, hold it to keep your momentum!

UNLEASHED PROJECT COMPLETE
THEKOLDK1

Play Sonic Unleashed's daytime stages in Sonic Generations!

CODES

RETAIN JUMP DASH VELOCITY
AHREMIC

Keeps momentum after a jump dash, rather than dropping like a rock.
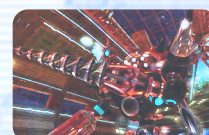
PER SECOND SUPER RING LOSS
BRIANNU, M&M

Makes Super Sonic lose rings every second like the classic games.

DID YOU KNOW?

Character Design support for Sonic & The Secret Rings was handled by Cavia, the now-defunct studio responsible for NieR Replicant and Drakengard.

DISABLE BOOST FILTER
HYPER

What, you want to *hear* the music? C'mon now. Disables the boost music filter.

DISABLE ARTIFICIAL LOADING
HYPER

Disables Omochao Hints during Loading Screens, since they actually cause artificial loading times to occur to make them be readable.

EVERYTHING IN THE 'FIXES' SECTION
SKYTH, AHREMIC, N69, CHIMERA

All of the fixes in this section are handy - might as well switch them all on.

NOTES

While the Mod Manager does have a lot of configuration options baked into it, you might also want to grab the Configuration Tool rewrite by PTKay. It serves as a much nicer replacement for the pretty shoddy Config Tool included with Sonic Generations.

At the time of writing, Sonic x Shadow Generations is yet to be released. It remains to be seen what it'll entail for the modding scene; while I certainly expect the Shadow portion of the game to see plenty of modding, I'm not sure we'll see many of the original Generations' mods brought over; or at least, not many of the mods from recent years.

Generations modding has got more and more complex and sophisticated as time goes by, and even in the most optimistic scenario, the remaster will be starting code modders back at zero. I personally expect the original game to remain the 'way' to play, regardless of Sonic x Shadow Generations' mooted upgrades. To be fair, I said this about Colours Ultimate and was eventually proven wrong, but I just can't see that being the case here, or at least not for a long time.

DID YOU KNOW?

The 'Happy Birthday Sonic!' yell at the end of Sonic Generations' credits was recorded at Summer of Sonic 2011, in the UK (as well as Sonic Boom 2011 in the United States). So please rest easy, in the knowledge that Sonic Generations has a tiny bit of Tracker_TD in it.

SONIC LOST WORLD

Wii U - 2013/PC -2015

CONFIGURATION

The best way to play Sonic Lost World is to simply **not play it.**

That being said, the Steam version alongside HedgeModManager is the way to go. If you absolutely must play it, that is.

ABOUT

Sonic and Tails crash-land on the Lost Hex, a bizarre hexagonal planet that's home to the Deadly Six - a race of Zeti. Eggman's attempts to control the Zeti go askew, and a truce is called between Sonic and the mad scientist as they try to put a stop to the Zeti's ambitions for world domination.

ESSENTIALS

DLC RESTORATION
DEATH

Restores the Nintendo-themed DLC stages from the Wii U version.

LOST WORLD ESSENTIALS
SKYTH, SAJID, DEATH

Various fixes and improvements, such as for depth-of-field and cubemaps.

LOST WORLD IMPROVEMENT
SHOWIN

Various adjustments for Lost World. Installation is a little convoluted for this - I personally use the included alternate patches that keeps the original level design and Zavok's original boss fight, and don't bother with the patched exe. The physics changes are dramatically overtuned, and I think they make the game considerably harder to play properly.
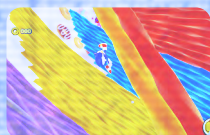
WII U FONT
CN

Restores the font used in the Wii U version.

DID YOU KNOW?

Sonic's first appearance in a SEGA game was actually Rad Mo- what? You already know this one? You've heard it a thousand times? Oh...

56

FLARE'S GUI TEXTURES
FLARE, COLAGUNNER

Much higher-res HUD graphics. That said, this mod does increase loading times pretty significantly, so you might opt to go without it.

FIXED SUPER SONIC
M&M

Fixes Super Sonic's lack of mouth-switching and also stops his quills getting broken by most animations.

OPTIONAL

GENERATIONS SONIC
M&M

If you hate shorter quills, you're in luck! I do generally prefer the Generations model to Lost World's, so this is handy.

JP VOICES
TRACKER_TD

Replaces the EN voice track with the Japanese one. There's no Re-Translated mod for this game, but I use the JP voices anyway just so the Deadly Six's mid-stage rants are less insufferable to listen to.

CODES

EVERYTHING IN THE 'FIXES' SECTION
DEATH, SAJID, DARIO

Plenty of fixes for stuff like wall jumping, collision issues, and what not.

DISABLE MODEL SCALING
DEATH

Disables the scaling applied to Sonic's model during gameplay.

INFINITE BOUNCE ATTACKS
DEATH

Allows you to bounce to your heart's content, like in Adventure 2.

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SONIC FORCES

PC - 2017

CONFIGURATION

Sonic Forces' Steam version supports - you guessed it - the HedgeModManager.

ABOUT

Dr. Eggman gains a new ally, Infinite the Jackal. Powered by the Phantom Ruby, Infinite makes short work of Sonic, and with him imprisoned on the Death Egg, Eggman soon takes over the world. Now it's up to Sonic's friends, Classic Sonic (who's here for some reason), and Your Original Character(!) to save the day.

ESSENTIALS

CLASSIC SONIC IMPROVEMENT
SHOWIN, CORNFLAKERUSH

Improvements to Classic Sonic, once again - but it also includes CFR's improvements to Modern Sonic, too! Sadly, the version of CFR's Modern tweaks included breaks the grinding animation slightly, but it's not super noticeable.

DEFINITIVE FORCES SONIC
IULIAN204_, SONEN10

Makes Modern Sonic look a little bit nicer than he does in the base game.

FORCES RETRANSLATED
SCENIKEIGHT

You guessed it - implements Windii's translated Japanese script.

OPTIONAL

SONIC FORCES OVERCLOCKED
OVERCLOCKED TEAM

A fan-made continuation of Forces' story with insanely high production values, to the point this mod's arguably superior to the game it's built off. Definitely worth a shot after beating the original game.

SONIC FORCES RE-IMAGINED
BRANDONJ

Reworks a bunch of levels to have more engaging level design and extra flourishes. Currently not fully compatible with the Classic Sonic Improvement mod without manually splicing the mods together in some form; but what is here is so high-quality, that if the mod is finished someday it may become Essential.

FREE CAMERA
SUPERSONIC16, CODENAMEGAMMA

Gives the game a de-facto Photo Mode!

CODES

360 DEGREE MOVEMENT
SKYTH

Allows Sonic to move in 360 degrees rather than 8 directions. Yes, you seriously need a mod for this. Bloody hell.

SMOOTH CAMERA
HYPER, AHREMIC

Replaces the game's linear camera interpolation with a smoother version.

DID YOU KNOW?

A purported early draft of Sonic Forces' script leaked online at some point, featuring annotations from someone dubbed 'AW'. Most of them ridicule the script for things Sonic fans would likely find stupid, and the script itself also mentions Infinite creating illusions of Mephiles, as he does the other villains.

SONIC FRONTIERS

PC - 2022

CONFIGURATION

Sonic Frontiers' Steam version once again supports the HedgeModManager.

ABOUT

Sonic, Tails and Amy travel to the Starfall Islands. However, the latter two are trapped in Cyberspace (along with Knuckles), and Sonic is left to unravel the secrets of the island and its ties to the Chaos Emeralds - all whilst butting heads with Sage, an advanced AI in the form of a young girl.
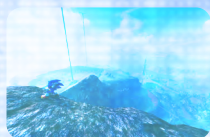
ESSENTIALS

TRACKER PHYSICS
TRACKER_TD

There's a lot of physics mods for Frontiers. I use this one, because I made it.

KORONE COLLAB DLC
M&M, HYPER, BSF, SUPERSONIC16, CALOOSH

Enables the Inguami Korone DLC exclusive to certain Japanese pre-orders for the console versions. Go forth and claim yubis everywhere, or something.

SONIC'S KOCO EMOTE
M&M, HYPER, SUPERSONIC16, MEGAMI24, BREAKTHETARGETS

As with the above mod, enables an idle animation for Sonic that was previously exclusive to SEGA's Lucky Lottery as a prize.

NO CUTSCENE AFTER CHALLENGES
7YU7

Removes the small cutscene after every challenge, since it gets more than a little repetitive seeing it over and over again. Set Show Map in the mod's config to 'yes', or your completion percentage won't update after clearing challenges.

LESS ANNOYING COMBAT INPUTS
DATSQUISHYFELLO

Reworks some of the combat inputs to make them overlap less, so there's less chance of doing special moves by accident.

OUTFIT FIXES
M&M

Applies the Phantom Rush afterimages and Cyloop Aura to Sonic's DLC outfits, as well as giving Super Sonic support for all of them.

GRAPHICS ENHANCEMENT
JAV.WAV, NIKKMAN, TREPE

Massively configurable suite of graphical improvements for Frontiers, bringing it more in line with what you'd expect a current-gen Sonic game to look like.

GIGANTO FOG
LIGHTNINGWYVERN

Implements fog into Giganto arena, as described/seen in leaks of Frontiers.

BETA SUPER TRANSFORMATION
ASHRINDY

Restores the cooler looking Super transformation effect from leaked early footage.

SKY ISLAND OURANOS
INVALIDFILE

Adds Chaos Island's cloud layer to Ouranos, giving it a unique vibe and helping to hide the fact it's just the other half of Kronos Island.

LEGACY SPINDASH
WEEZLEY

Changes the unlockable Spin Dash to work more like the older games. May not play as nicely with the Cyber Space stages in Final Horizon.
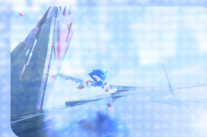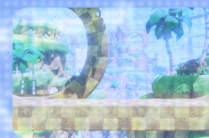
OPTIONAL

SHINY SUPER SONIC
WEEZLEY

Changes Super Sonic's fur material to resemble Sonic Heroes' ultra-shiny version.

DREAM TEAM ANIMATIONS
ZEROES_07, MATT CRAFTS

Imports animations from Sonic Dream Team for iOS.

SONIC FRONTIERS

CONTINUED FROM PREVIOUS PAGE

C O D E S

DISABLE RUNNING FALL
HYPER

Make Sonic always use his falling animation rather than running off ledges, classic-style.

HOMING ATTACK TRICK ANIMATIONS
HYPER

Sonic will use his trick animations after doing a homing attack.

DISABLE DROP DASH CAMERA DELAY
HYPER

Useful when using the Drop Dash on Slide code mentioned later.

DISABLE EVENT CAMERAS
HYPER

I disable the Jellyfish, Spin Charge and Super Sonic damage cameras.

SMOOTH CAMERA
AHREMIC

Replaces the linear camera interpolation with a nicer, smoother version.

EVERYTHING IN THE 'FIXES' SECTION
HYPER, WASIFBOOMZ, SAILS, DEATH, DUCKDEALER, AHREMIC, CHICO

So many bloody fixes.

D I D   Y O U   K N O W ?

Sonic appears in the game SpikeOut, in the Astro Mall stage. Bizarrely, the art used was a mix of classic art, and entries to the contest to redesign Sonic for Sonic Adventure. Even Naoto Ohshima was baffled to see that art in the wild when I showed him it, years later...

SONIC SKILL TWEAKS
HYPER

The Sonic Skills section of the codes has several codes I use, including Dodge from Homing Shot, Disable Loop Kick on Slide, Disable Sonic Boom for Regular Objects, and Disable Spin Slash on Drop Dash.

DISABLE HIT STOP
HYPER

Disables the slow-motion effect after attacks. Hit Stop's fun... when it's done right.

STAY ON CLIMBABLE WALLS
WASIFBOOMZ

Prevents Sonic and Knuckles from detatching or sliding down climbable walls when hitting other walls or ceilings.

DISABLE LAVA INSTANT-DEATH
HYPER

Instead of drowning in lava, Sonic will bounce out of it, Mario 64 style.

HIDE STAR BEACONS
HYPER

Hides the blinding beacons that emit from stars during Starfall.

DISABLE SHADOW ANGLE LIMIT
HYPER, GAMINGLEROY

Shadows will now line up correctly with the sun and moon.

FORCE LIGHT SCATTERING + HI-RELFECTIONS
WASIFBOOMZ, ROBOWIL, HYPER

Forces light scattering to render, and forces higher detail reflections.

SONIC PHYSICS CODES
HYPER, WEEZLEY

Various codes to make Sonic feel a bit better to control. I use Disable Decelerate Collision, Reduced Homing Delay, Retain Horizontal Velocity from Jump, Retain Velocity from Enemy Bounce and Retain Velocity when Jumping Up Slopes.

SONIC SUPERSTARS

PC - 2023

CONFIGURATION

Sonic Superstars is built in Unity. As a result, it makes use of not one, but two different modloaders. BepinEX will inject code-based mods. Concursus will handle Asset mods.

ABOUT

Sonic and friends travel to yet another island - this time, the North Star Islands. But Dr. Eggman's already there, trying to piece together a legendary power said to reside on the island - and he's hired Fang the Hunter to keep Sonic at bay, with the clumsy Trip the Sungazer as their reluctant tour guide.

ESSENTIALS

ABILITIES MOD
WISTFULHOPES

Fixes stuff like Knuckles not being able to spin dash out of glide drop.

BIG RINGS GIVE 50 RINGS
DOOMAN

Once all Chaos Emeralds are collected, Big Rings will give 50 Rings, like in Sonic 3 and Sonic Mania.

COMIC BOOK SKINS
PMWOAHE

Missed the comic book skins? Or annoyed they missed out Eggman and Trip? Well, this mod's for you. SEGA should really just release them...
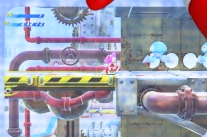
CANCEL EMERALD POWERS
DOOMAN

Allows cancelling Emerald Powers mid-use... like the game claims you can.

DOILUS SOUNDTRACK
CURATED BY THE DOILUS STAGE

Replaces some of the game's soundtrack with one that's easier on the ears. Curated by The Doilus Stage, one of the only the Discord servers I hang about in.

DISABLE CONTEXT-SENSITIVE PROMPTS
DOOMAN

Stops the game from pestering you about using Emerald Powers at certain times.

CAMERA MOD
DOOMAN

Allows setting a custom FOV for the camera. Would be Essential, but unfortunately causes some pretty severe bugs in Lagoon City Act 2.

SPINDASH FIX
DOOMAN

Makes the spindash work properly when playing the game at refresh rates above 60hz.

COMIC BOOK ADVENTURE
PMWOAHE

What, the comic skins aren't enough for you? Fine - then comic book skin *the entire game*, why don't you?

DID YOU KNOW?

Sonic Superstars marked the return of Naoto Ohshima to the Sonic series, after a 20 year absence from the series. His studio Arzest were responsible for developing it, and he also designed Trip!

SEE YOU NEXT GAME!

CUSTOM SHORTCUTS

One thing that's handy is adding Steam shortcuts for launching these games, since a few of them aren't on Steam.

For the most part, it's easy - go to Add Non-Steam Game in the bottom left of the Library menu, and then add the exe file for the game you want. Then right-click its blank box art, and there's an option to add custom art for it. You can even add a custom banner and logo on its main game page - here's my personal Steam Grid collection.

This gets a bit more complicated with emulation, but not too much. Steam only lets you *select* .exe files when adding a non-Steam game, but you can actually make it launch anything, such as a shortcut. Dolphin can generate shortcut files to any game just by right-clicking them in Dolphin and selecting the option to - so if you add say, Dolphin.exe to Steam, then go into the game's Steam properties and rename it to the name of your Sonic Colours shortcut (i.e. "Sonic Colours DX.lnk), Steam will now launch Sonic Colours directly instead!

The original Perfect System guide actually inspired some folks to make their own 'Perfect System' covers that outdo my own! Check out Neptune 13's SteamGridDB page for a huge selection of awesome cover art.

I also do a lot of icon replacement - I like everything to look neat and organised, so I made custom icons that mostly stick to 2D artwork, as shortcuts for my desktop.

In some cases, I've even replaced the icons for the game exes themselves - for example, Sonic 1 and 2's decompilations usually use a Retro Engine icon by default, since it's one program you can use with either game depending on the RSDK placed in the folder. I have two copies of the decompilation in separate folders, with the relevant RSDK alongside each. I then used Resource Hacker to replace the Retro Engine icon with one appropriate for the game I'm playing.

This doesn't always work sadly - I simply cannot seem to replace Sonic 3 A.I.R.'s icon on the taskbar no matter what I do - but it makes everything look a little more consistent.

You can find my icons here.
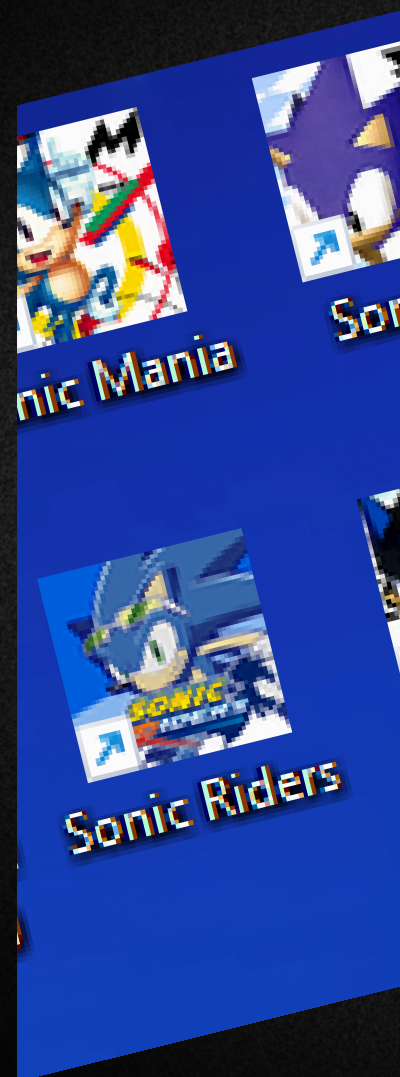
STEAM DECK
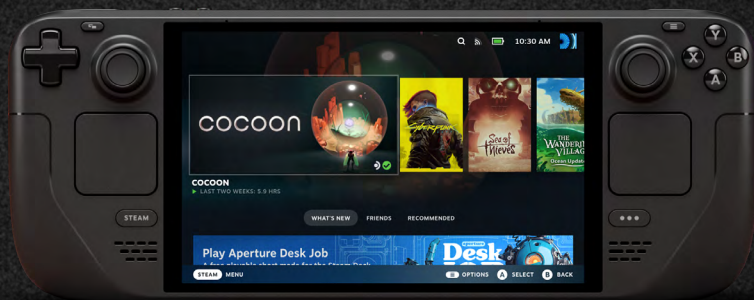
Nowadays, the Steam Deck is a very popular machine for playing a wide array of games on the go - and the main reason I picked one up was for having modded Sonic games with me wherever I went. But the Steam Deck is a Linux-based machine, and as a result it's not always simple getting mods up and running on it.

Thankfully, my friend Will AKA TheRealYocow, made his own Sonic modding guide after the release of Perfect System V1, focused entirely on getting just about every Sonic game you can think of running on Steam Deck.

It was extremely useful to me, and so I highly recommend it to people trying to figure out how to get their favourite Sonic titles playing their best on the Steam Deck.

I will note that I did do a few things slightly differently to the guide - for example, I opt to use the Xbox 360 version of Sonic 06 via Xenia as I do on my main PC. I simply copied my 'custom build' of 06, after installing mods via the mod loader on my PC, to my Steam Deck. This avoids messing with the 06 Mod Loader on Steam Deck, where it struggles to work properly. In addition, Reloaded II (for Heroes) recently got a 1-click setup for Linux, which should make things far easier on that end.

Either way, the guide comes highly recommended by me. Give it a read, and enjoy Sonic games no matter where you are! It's certainly handy for train or plane journeys...

CONCLUSION

It's nice to have this guide done, at last. The first Perfect System guide was very much geared towards power users, and the massive, sweeping list of mods might've seemed nonsensical at some point... so I hope this list is more digestible, and more accessible to newcomers.

I'll try to do a better job at maintaining the guide this time, although I make no promises. The Sonic modding community is constantly in flux; since the original Perfect System guide was published, modding for the decompilations went through a seismic shift, Miracle Edition got withheld about 3 times, and 3 AIR modding went through an entire crisis... which is why I use Origins now. I'll be more pre-disposed to maintaining some sections more than others, probably.

Modding games is fun. Making that one QOL tweak, giant level design overhauls, or just changing Sonic's colour - there's real value in doing these things, because it can give a better appreciation for what goes into making these games in the first place.

It's staggering to see how far the Sonic community has come, even just in the past few years. Nowadays we're seeing people port over Adventure physics into Sonic Generations, or competitive patches for Sonic the Fighters... even more thorough hacks for Sonic Advance are a more recent development.

I'm excited to see where the future takes the modding community. There's nothing I love more than playing Sonic games, and to some extent I'll always be chasing the 'Perfect System' for playing them. But this guide should provide a solid basis that you can build on yourself, to find your own 'Perfect System' for Sonic.

If you have any suggestions for stuff you think might belong in this guide, just give me a shout on Twitter or BlueSky. I don't bite! And I'm always up for learning about cool new mods.

Thank you for reading this, and thank you to those who waited so long for this guide's update to get finished. I hope it was worth the wait!

SONIC™
PERFECT SYSTEM
COLLECTION

SPECIAL THANKS
Halseeyon
Neptune13
RobotFaker
Cola64
The Doilus Stage
The Sonic Unleashed Modding Community

All Sonic Modders & Fan Game Developers
you rock like Crush 40!

SEGA & Sonic Team
for making Sonic games!

Technosoft
for making Thunder Force, and the original 'Perfect System' name.

Tsukumo Hyakutaro
for making the Thunder Force V soundtrack.

:: OTHER GAMES YOU SHOULD PLAY::

ESP RA.DE
Popful Mail
The Legend of Heroes: Trails in the Sky
Gurumin
Zwei II: The Ilvard Insurrection
Klonoa: Door to Phantomile
Ridge Racer Type 4
Daytona USA 2: Battle on the Edge
Power Drift
Cotton Rock 'n Roll
Fighting Vipers 2
Phantasy Star
Burning Rangers
Castlevania: Rondo of Blood
Castlevania: Symphony of the Night
Shinobi 2002
Alien Soldier
Gunstar Heroes
Gotta Protectors: The Cart of Darkness
Thunder Force IV
Cyber Troopers Virtual On: Oratorio Tangram
Dragon's Dogma
Hatsune Miku: Project DIVA MegaMix+
Numan Athletics
Illbleed
Fantasy Zone II: The Tears of Opa-Opa (System 16C)

ASTRO MUSEUM

A SLAM DUNK TO YOUR HEART!

The all new website from Tracker_TD.

VIDEO GAME PARK

SONIC MODS

VMU STATION